

Abstract of the Disclosure

A device (1) and/or a method for measuring the lifetime of the fluorescence of fluorophores in samples are disclosed, the device used (1) including at least one
5 light source (2) for exciting the fluorescence of the fluorophores, an irradiation optic (3) for directing the excitation light (4) onto these samples, a sample table (5) for placing a microplate (6), which contains a sample, at the irradiation optic (3), an emission optic (7) for directing the fluorescence light (8) from the sam-
10 ples onto a detector (9), and at least one detector (9) having analysis electronics. The device disclosed and/or the corresponding method are distinguished in that the irradiation optic (3) of the device (1) includes a beam splitter (10) hav-
ing at least two mirrors (11), which directs a part of the light (4) from the at least one light source (2), which always enters the beam splitter (10) with the same power and the same pulse shape along a first optical axis (12), in the
15 direction of a sample and allows a part of this light to pass on to the respective mirror (11) lying behind it. In addition, advantageous fiber optics and a computer program, for use in the device disclosed and/or for performing the method disclosed, are disclosed and claimed.

20 (Figure 1B)